



Patent

Attorney Docket No: GP-00102.P.1.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)	
)	
Giovanni Paternostro)	
)	Examiner: HAMA, Joanne
)	
Application Number: 10/804,645)	Group Art Unit: 1632
)	
Filed: March 19, 2004)	
)	
For: METHOD OF SCREENING FOR)	
GENES OR AGENTS AFFECTING)	
THE RESPONSE OF THE)	
DROSOPHILA HEART TO)	
HYPOXIA OR ANOXIA)	
_____)	

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

Sir:

In response to the Office Action mailed October 8, 2004, Applicant submits the following election and traverse. Applicants submit this response within two months of the mailing of the Office Action.

Applicant respectfully requests a one (1) month extension of time to file a reply and encloses the appropriate fee for a one (1) month extension of time.

~~12/10/2004 NROCHA1 00000015 10804645~~

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12/10/2004 NROCHA1 00000016 10804645

01 FC:2251

55.00 OP

I. ELECTION

Applicant elects the invention of Group II, drawn to a method of screening for agents affecting cardiac function. This election is made with traverse.

The above-identified patent application has been examined for restriction purposes only. The Examiner has set forth the following 2 Groups:

Group Number(s)	Claims	Subject Matter
I	1-16	A method of screening for a gene affecting cardiac function after or during hypoxia or anoxia, classified in class 536, subclass 23.1
II	17-24	A method of screening for agents affecting cardiac function after or during hypoxia or anoxia, classified in class 424, subclass 9.2

II. TRAVERSE OF RESTRICTION REQUIREMENT

In the Office Action, the Examiner restricts the claims to two distinct and independent inventions. For the reasons set forth below, Applicant respectfully traverses this restriction requirement and respectfully requests that the above-identified Claims corresponding to Groups I and II be joined for examination.

A. Groups I and II Are Not Unrelated

The Examiner alleges that restriction of the Claims into two inventions is proper because Groups I and II are unrelated and therefore distinct. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04,

MPEP § 808.01). The Examiner alleges that since the Claims of Group I are drawn to a method of screening for a gene and the Claims of Group II are drawn to a method of screening for an agent, the Groups are unrelated.

In response, Applicant provides the following non-limiting examples, which demonstrate that methods of screening for a gene and methods of screening for an agent are capable of use together. Thus, Applicant traverses the Examiner's restriction requirement.

Methods of identifying new genes and methods of identifying new agents have been used together. One combination of utilizing genetic methods with methods of identifying chemical agents is called chemical genetics, as reviewed, for example in (Stockwell B.R. "Chemical genetics: ligand-based discovery of gene function" Nature Reviews Genetics, 1:116-125, 2000, which is provided herewith).

As a second example, a method of screening for a chemical agent may include obtaining a chemical library suspected of including the chemical agent, screening the chemical library against one or more particular phenotypes and identifying the chemical agent that provides a favorable response. A gene may also be identified from the present example by genetic analysis of the phenotype that displayed the favorable response.

As a third example, a method of screening for a gene may include mutating a gene, exposing the mutated gene or a resulting mutated protein to a chemical agent and detecting changes in phenotypic sensitivity to the agent thereby identifying or confirming the gene. A chemical agent may also be identified in the present example by selecting for the agent that demonstrates favorable phenotypic sensitivity.

B. Examination of Groups I and II Would Not Seriously Burden the Examiner

The M.P.E.P. §803 (May 2004) sets forth the following criteria for a restriction requirement between patentably distinct inventions

- A. The inventions must be independent (see M.P.E.P. §802.01, §806.04, §808.01) or distinct as claimed (see M.P.E.P. §806.05 - §806.05(i)); and
- B. There must be a serious burden to the Examiner if restriction is required (see M.P.E.P. §803.02, §806.04(a) - (j), §808.01(a) and §808.02).

Examination of the Claims of Groups I and II would not provide a serious burden to the Examiner because the methods disclosed in Groups I and II may be connected by a single, searchable unifying relationship, namely a screening method relating to the affects of cardiac function after or during hypoxia or anoxia. The Claims of Groups I and II include imaging, measuring and analyzing the heart movements of Drosophila to study cardiac function and its changes during hypoxia or anoxia. Thus, a single searchable unifying element can be primarily searched by electronically searching key words.

III. CONCLUSION

Applicant elects the invention of Group II, however, based on the commonality of the subject matter and the arguments setforth above, Applicant requests that the Examiner join the pending claims of Groups I, and II into a single group. Applicant respectfully submits that the claims are ready for examination and in condition for allowance.

Please apply any charges not covered, or any credits, to **Deposit Account Number 501321** in the name of David R. Preston & Associates, having **Customer Number 24232**.

Respectfully submitted,



David R. Preston
Reg. No. 38,710

Dec. 7, 2004
Date

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FEE TRANSMITTAL**for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$55.00)**Complete if Known**

Application Number	10/804,645
Filing Date	3/19/2004
First Named Inventor	Giovanni Paternostro
Examiner Name	Joanne Hama
Art Unit	1632
Attorney Docket No.	GP-00102.P.1.1

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

501321

David R Preston

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)				(\$)	0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid	
Total Claims		-20** =		X		=	
Independent Claims		-3** =		X		=	
Multiple Dependent							

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)				(\$)	0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	55.00
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$55.00)**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)	David R Preston	Registration No. (Attorney/Agent)	38,710	Telephone	858-724-0375
Signature		Date	Dec 7, 2004		

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